ABSTRACT

The instant invention provides an economical flow-through method for determining amount of target proteins in a sample. An antibody preparation (whether polyclonal or monoclonal, or any equivalent specific binding agent) is used to capture and thus enrich a specific monitor peptide (a specific peptide fragment of a protein to be quantitated in a proteolytic digest of a complex protein sample) and an internal standard peptide (the same chemical structure but including stable isotope labels). Upon elution into a suitable mass spectrometer, the natural (sample derived) and internal standard (isotope labeled) peptides are quantitated, and their measured abundance ratio used to calculate the abundance of the monitor peptide, and its parent protein, in the initial sample